

# Team Belgium\_E cube

Simple, Quick assembly-do it yourself

Available model, parts factory built, shipped

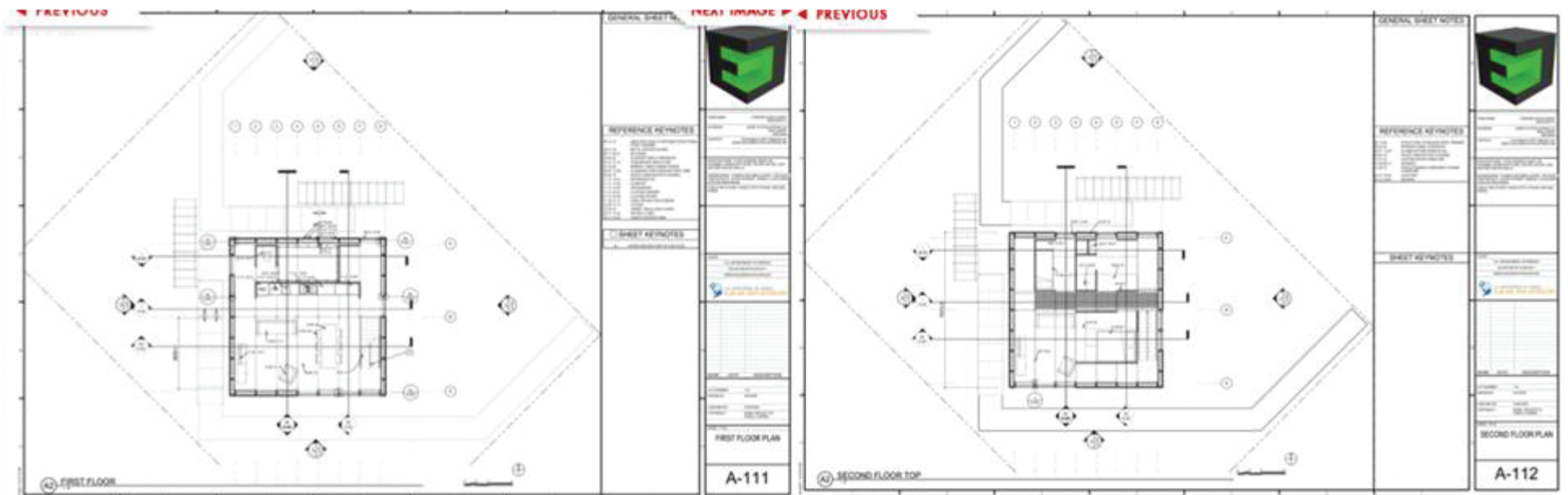
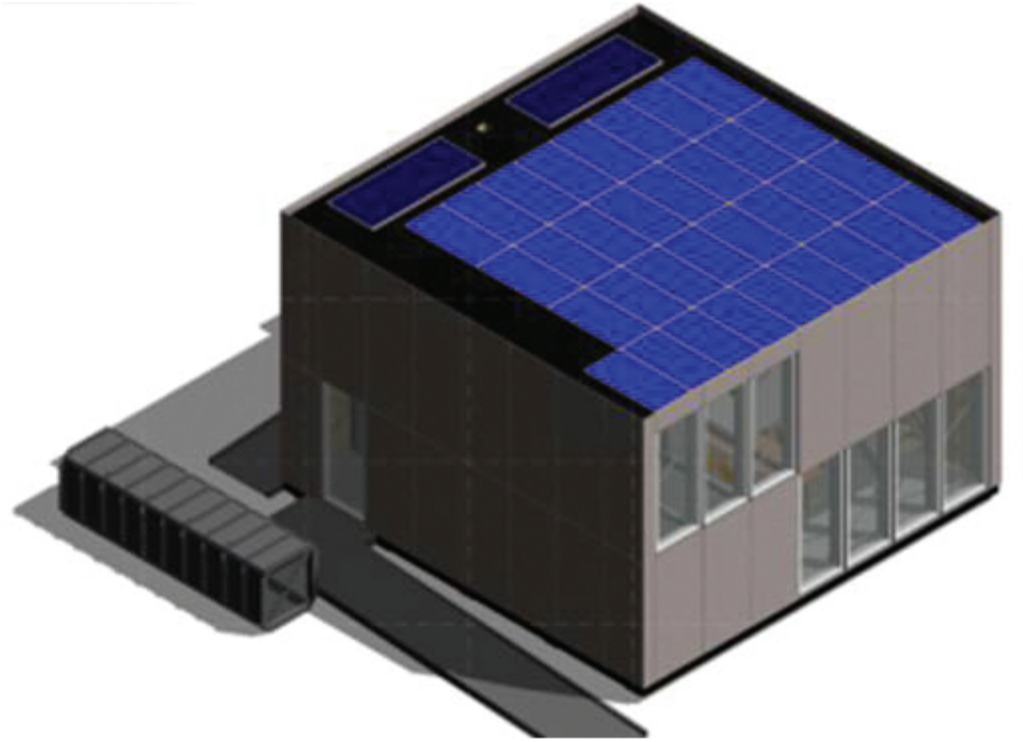
Expandable – Personalize

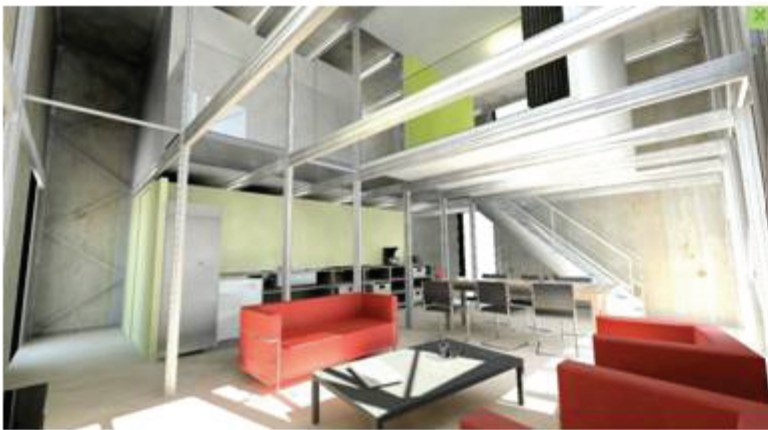
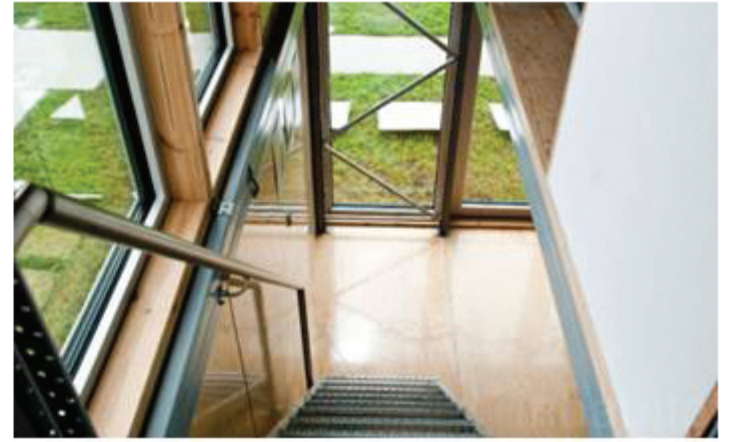
Inexpensive

Buildable - 2 stories, Do it yourself

A plug-and-play electrical wiring system/solar

Every exterior piece (windows, insulated panels, doors) is built to the same dimensions and can be interchanged.







**one of five teams that won zero points for Energy Balance**

**E cube has adapted the Passive House Standard, which implies that the performance of the building envelope ensures that we can heat the house without a conventional heating system. The additional cost required to achieve such benefits will be recovered through the reduced energy demand (which allows us to install a smaller amount of PV panels). In addition, the use of passive solar gain strategies and phase-change materials will maximize the use of direct solar gains.**

**Passive House Institute US**

1. Architecture
2. Market Appeal
3. Engineering
4. Communications
5. Affordability

6. Comfort
7. Hot Water
8. Appliances
9. Home Entertainment
10. Energy Balance

Team	Engineering		Energy Balance		Comfort Zone		Water Heating		Overall	
	Score	Ranking	Score	Ranking	Score	Ranking	Score	Ranking	Score	Ranking
Maryland	89.85	4	100.00	1	73.19	14	100	1	951.15	1
Purdue	88.84	6	100.00	1	91.82	5	99.75	3	931.39	2
New Zealand	92.55	1	100.00	1	98.65	1	100	1	919.06	3
Middlebury College	83.02	11	83.23	4	81.63	7	97.375	5	914.81	4
Ohio State	89.38	5	88.59	3	56.4	19	100	1	903.94	5
SCI-Arc/Caltech	90.47	2	100.00	1	61.83	17	100	1	899.49	6
Illinois	73.05	16	100.00	1	72.66	15	98.25	4	875.72	7
Tennessee Team	89.94	3	100.00	1	88.2	6	100	1	859.13	8
Massachusetts	84.34	9	96.16	2	64.6	16	96.375	6	856.35	9
Team Canada	83.09	10	56.01	5	77.9	11	99.5	2	836.42	10
Florida Int'l	71.50	17	100.00	1	78.72	10	86	9	833.16	11
Appalachian State	80.78	13	36.58	6	80.34	9	100	1	832.50	12
Parsons NS	86.45	8	35.17	7	81.07	8	100	1	828.82	13
Stevens	86.45	8	35.17	7	81.07	8	100	1	828.82	13
Tidewater Virginia	64.30	19	0.00	9	96.14	3	93.75	7	774.91	14
Team China	87.42	7	3.59	8	74.63	13	93.75	7	765.47	15
Team Belgium	73.55	15	0.00	9	77.35	12	89.688	8	709.84	16
Team New York	81.65	12	0.00	9	61.35	18	62.5	11	677.36	17
New Jersey	78.30	14	0.00	9	92.88	4	85.688	10	669.35	18
Team Florida	65.95	18	0.00	9	98.53	2	0	12	619.01	19

Source: [www.solardecaathlon.org](http://www.solardecaathlon.org)

<http://www.solardecathlon.ugent.be/nl>

[http://www.solardecathlon.gov/past/2011/team\\_belgium.html](http://www.solardecathlon.gov/past/2011/team_belgium.html)

<http://www.aceee.org/files/proceedings/2012/data/papers/0193-000033.pdf>

<http://www.youtube.com/watch?v=V54azQ6WLOY>

<http://inhabitat.com/the-e-cube-team-belgiums-solar-decathlon-house-is-a-diy-solution-to-housing/>

**Team Belgium's entry to the U.S. Department of Energy Solar Decathlon 2011.**